

In the Claims

This listing of claims will replace all prior versions, and listings, of claims.

Listing of Claims

1. – 14. Canceled.

15. (currently amended) A renewing method for a glass molding die, comprising:
providing a used glass molding die comprising a substrate, a first noble metal layer
overlying the substrate, a second noble metal layer overlying the first noble metal
layer ~~metal~~, a carbon-containing third noble metal layer overlying the second
noble metal layer, and a diamond-like carbon (DLC) ~~DLC~~ passivation film
overlying the third noble metal layer;
removing the passivation film and partially removing the third noble metal layer using
oxygen plasma;
grinding and polishing the molding die to completely remove the third noble metal layer;
cleaning the polished molding die;
forming a fourth noble metal layer overlying the second noble metal layer; and
forming a second passivation film overlying the fourth noble metal layer, wherein the
second passivation film comprises ~~comprising approximately~~ the same material as
the passivation film overlying the third ~~fourth~~ noble metal layer.

16. (original) The method as claimed in claim 15, wherein the substrate comprises tungsten carbide.
17. (currently amended) The method as claimed in claim 15 ~~4~~, wherein the first noble metal layer comprises Ni-containing Ir-Re alloy.
18. (original) The method as claimed in claim 15, wherein the thickness of first noble metal layer comprises about 0.3 to 0.6 μ m.
19. (original) The method as claimed in claim 15, wherein the second noble metal layer comprises Ir-Re alloy.
20. (original) The method as claimed in claim 15, wherein the thickness of second noble metal layer is about 0.3 to 0.6 μ m.
21. (currently amended) The method as claimed in claim 1, wherein the thickness of third noble metal ~~intermediate~~ layer is about 0.01 to 0.05 μ m.
22. (currently amended)The method as claimed in claim 15, wherein the third noble metal layer comprises carbon-containing Ir-Re alloy with C, Ir, and Re atoms therein ~~approximately~~ arranged as superlattice.

23. (original) The method as claimed in claim 15, wherein the third noble metal layer comprises carburized Ir-Re alloy.
24. (currently amended) The method as claimed in claim 15, wherein the fourth noble metal layer comprises ~~approximately~~ the same material as the third noble metal layer.
25. (currently amended)The method as claimed in claim 15, wherein the fourth noble metal layer comprises carbon-containing Ir-Re alloy with C, Ir, and Re atoms therein ~~approximately~~ arranged as superlattice.
26. (original) The method as claimed in claim 25, further comprising forming the fourth noble metal layer using co-sputtering with multiple targets.
27. (original) The method as claimed in claim 25, wherein carbon concentration in the fourth noble metal layer is approximately 20% or more.
28. (original) The method as claimed in claim 15, wherein the fourth noble metal layer comprises carburized Ir-Re alloy.
29. (original) The method as claimed in claim 28, wherein forming the fourth noble metal layer further comprises:
forming a Ir-Re alloy layer overlying the second noble metal layer; and

implanting carbon ions into a surface of the Ir-Re alloy layer, thereby carburizing the Ir-Re alloy layer.

30. (original) The method as claimed in claim 28, wherein carbon concentration in the carburized surface of the fourth noble metal layer is approximately 20% or more.
31. (original) The method as claimed in claim 15, wherein the thickness of second passivation film is about 0.01 to 0.3 μ m.
32. (original) The method as claimed in claim 1, wherein the second passivation film has a molding surface.